

3.4 Configuration Management (CM) Activities

3.4.1 COTS Hardware Problem Scenario

3.4.1.1 Scenario Description

This scenario describes the failure of a hardware device (a workstation) that does NOT involve a configuration management issue. In this example, a Trouble Ticket (TT) is submitted for a workstation that gives intermittent CPU errors. The Systems Administrator (SA) diagnoses the problem. The Maintenance Engineer (ME) resolves the problem. The ME oversees the resolution via the vendor's maintenance technician (VMT). The actors in this scenario are the Operator, Ops Supervisor, SA, ME, VMT and the ECS system.

3.4.1.2 Frequency

This scenario will run whenever there is a hardware problem which could be once a month.

3.4.1.3 Assumptions

1. The Ops Supervisor is continuously monitoring for new TTs.
2. The SA and ME periodically checks E-mail notifications for assigned Trouble Tickets.
3. In this scenario, the Ops Supervisor, SA and ME can assign any status or priority to a Trouble Ticket. This will be configurable at each DAAC.
4. When working with the Resolution Log, one can view all entries if one clicks on the button immediately to the right of the text box.
5. The Remedy schema shown is still being decided on.
6. Fields required for TT submission (Short Description and Submitter ID) are provided.
7. Trouble Ticketing is designed and configured to run 24 hours/day.

3.4.1.4 Components

Figure 3.4.1.4-1 indicates the interaction between the DAAC personnel and the ECS subsystems.

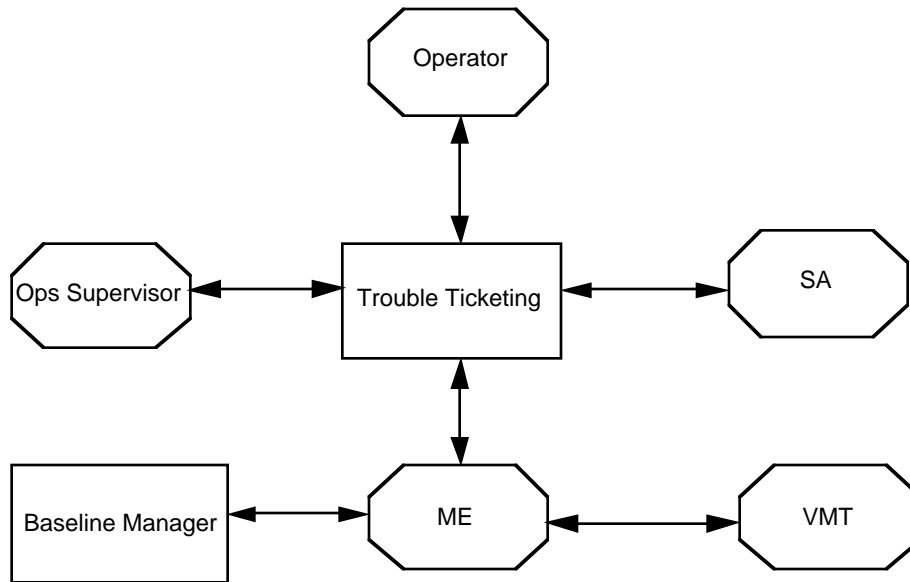


Figure 3.4.1.4-1. COTS Hardware Problem Components

3.4.1.5 Preconditions

Preconditions for this scenario are a Trouble Ticket must be submitted, a Ops Supervisor must be monitoring for incoming Trouble Tickets, Remedy should be running normally.

3.4.1.6 Detailed Steps of Process

Table 3.4.1.6-1 represents the details of this scenario. The times and duration given are approximate.

Table 3.4.1.6-1. COTS Hardware Problem Process (1 of 4)

| Step | Time (mins) | Operator (Submitter) | Operator (Ops Supervisor, SA and ME) | ECS System | Figure |
|------|-------------|---|--|--|-----------|
| 1 | <1 | Upon realization that a problem exists, an Operator logs into Remedy. | | Remedy starts with the Release A Trouble Ticketing schema. | 3.4.1.6-1 |
| 2 | <1 | Operator chooses "Open Submit" from the File menu. | | | |
| 3 | <5 | Operator enters problem impact, problem short description, problem long description, submitter id, and hardware resource. | | | |
| 4 | <1 | Satisfied with entry, Operator then clicks on the Apply button to submit TT. | | | 3.4.1.6-2 |
| 5 | <1 | | | System creates new entry in Remedy, fills in user info (submitter name, phone number, e-mail address, home DAAC), notifies Ops Supervisor, displays successful submission message with TT number at bottom of Submit window, and notifies Operator via e-mail. | 3.4.1.6-3 |
| 6 | <1 | Receives e-mail verifying that the TT was submitted. | Ops Supervisor receives notification that a new Trouble Ticket has entered the system. | | |
| 7 | <1 | | Ops Supervisor refreshes TT list to check for most recent TTs. | System (Remedy) refreshes list. | 3.4.1.6-4 |
| 8 | <1 | | Ops Supervisor selects TT for work and opens it. | System (Remedy) opens TT. | 3.4.1.6-5 |

| Step | Time (mins) | Operator (Submitter) | Operator (Ops Supervisor, SA and ME) | ECS System | Figure |
|------|-------------|----------------------|--|---|-----------|
| 9 | <5 | | On examining the detailed information, the Ops Supervisor changes the value of Ticket Status from New to Assigned. | (Options: New, Assigned, In-Progress, Forwarded, Closed, Rejected, Suspended) | |
| 10 | <1 | | The Ops Supervisor assigns the value of Medium to the Assigned-Priority field. | (Options: Low, Medium, High) | |
| 11 | <1 | | The Ops Supervisor assigns the Trouble Ticket to SA to fix the problem. | | |
| 12 | <1 | | The Ops Supervisor clicks on Apply to carry out these new changes. | System (Remedy) delivers e-mail to SA. | 3.4.1.6-6 |
| 13 | <1 | | The SA receives e-mail notifying him/her of the assignment. | | 3.4.1.6-7 |
| 14 | <10 | | On viewing the TT and running some preliminary tests, the SA warrants the need to run a vendor diagnostic and makes an entry in the Resolution Log to this effect. | | 3.4.1.6-8 |
| 15 | <20 | | The SA takes the server off line. (Reference 3.8.1 Data Processing Host Routine Maintenance) | | |
| 16 | <30 | | The SA runs a vendor diagnostic. | | |
| 17 | <10 | | The SA diagnoses the problem as a system board failure and makes an entry in the Resolution Log to this effect . | | |

| | | | | | |
|----|----|--|--|--|--|
| 18 | <1 | | The SA then changes the Assigned-to field to ME. | | |
|----|----|--|--|--|--|

| Step | Time (mins) | Operator (Submitter) | Operator (Ops Supervisor, SA and ME) | ECS System | Figure |
|------|-------------|----------------------|--|------------|-----------|
| 19 | <1 | | The SA then clicks on the submit button to carry out these changes/additions. | | 3.4.1.6-9 |
| 20 | <1 | | The ME receives e-mail notifying him/her of the assignment. | | |
| 21 | 5 | | The ME uses the BaseLine Manager to identify the workstation configuration and the responsible maintenance vendor. | | |
| 22 | 5 | | The ME records this information in the Resolution Log. | | |
| 23 | <1 | | The ME moves the Status from Assigned to Solution Proposed. | | |
| 24 | 20 | | The TT Review Board Chair compiles a package of new Solution Proposed TTs for review by the board. | | |
| 25 | 30 | | The TT Review Board considers the sensibility and long term effects of the proposed solution for this TT. | | |
| 26 | 5 | | The TT Review Board approves the solution and changes the Status to "Implement Solution". | | |
| 27 | 2 | | The ME then calls the maintenance vendor. | | |
| 28 | 240 | | The VMT arrives. | | |

| | | | | | |
|----|----|--|--|--|--|
| 29 | 30 | | The VMT confirms that the system board has failed. | | |
|----|----|--|--|--|--|

| Step | Time (mins) | Operator (Submitter) | Operator (Ops Supervisor, SA and ME) | ECS System | Figure |
|------|-------------|--|--|--|------------|
| 30 | 30 | | The VMT replaces the board with an identical board (i.e., same make, model, version) | | |
| 31 | 30 | | The VMT brings the system back up and verifies that the system is operational. | | |
| 32 | 2 | | The VMT reports the board replacement to ME. | | |
| 33 | 4 | | The ME then records the time the vendor arrived and departed and actions taken to resolve the problem into the Resolution Log. | | |
| 34 | <1 | | The ME then enters a closing code and submits back to board. | | |
| 35 | 10 | | The board approves fix and upon user verification closes TT. | System (Remedy) sends e-mail to Operator | 3.4.1.6-10 |
| 36 | <1 | The Operator receives e-mail notifying him/her of the TT being closed. | | | |
| 37 | 10 | | The ME then records the serial number of the new board into the property management system. | | |

3.4.1.7 Postconditions

Network is executing normally and Trouble Ticket remains in database for future reference.

The screenshot displays a software window titled "Modify Schema -- RelA-Trouble Tickets". The window has a menu bar with "Edit", "Attributes", and "Views". Below the menu bar, there are two tabs: "View Name" (set to "Default Admin View") and "Schema Name" (set to "RelA-Trouble Tickets").

The main area of the window contains a form with the following fields and controls:

- Ticket-Id:** A text field containing "11T".
- Ticket Status:** A dropdown menu set to "New".
- Assigned-Priority:** A dropdown menu set to "Low".
- Forward:** A button.
- Short Description:** A text field.
- Submitter Impact:** A dropdown menu set to "Low".
- Forward-to:** A text field.
- Long-Description:** A large text area.
- Resolution Log:** A large text area.
- Forwarded-from:** A text field.
- Forwarded-by:** A text field.
- Forward-date:** A text field.
- Submitter ID:** A text field.
- Assigned-To:** A text field.
- Closing Code:** A text field.
- Unique-Identifier:** A text field.
- Submitter Name:** A text field.
- Last-modified-by:** A text field.
- Closed-by:** A text field.
- Forwarded-to-1:** A text field.
- Submitter Phone:** A text field.
- Create-date:** A text field.
- Close-date:** A text field.
- Forwarded-to-2:** A text field.
- Submitter eMail:** A text field.
- Last-Modified-date:** A text field.
- Software Resource:** A text field.
- Forwarded-to-3:** A text field.
- Submitter Home DAAC:** A text field.
- Related CCR:** A text field.
- Hardware Resource:** A text field.
- Forwarded-to-4:** A text field.
- History:** A text field.
- Key Words:** A text field.
- Q1-To-Forward:** A text field.
- Forward-to-email:** A text field.
- Time New High:** A text field.
- Time Assigned High:** A text field.
- Time New Med:** A text field.
- Time Assigned Med:** A text field.
- Time New Low:** A text field.
- Time Assigned Low:** A text field.

At the bottom of the window, there are four buttons: "Apply", "Set Help...", "Change History...", and "Dismiss".

Figure 3.4.1.6-1. Remedy Trouble Ticket

Submit -- RelA-Trouble Tickets (cyclops)

Ticket-Id Ticket Status Assigned-Priority

Short Description Submitter Impact

Long-Description

Resolution Log

Submitter ID

Assigned-To

Closing Code

Submitter Name

Last-modified-by

Rejection Code

Submitter Phone

Create-date

Close/Rejection-date

Submitter eMail

Modified-date

Software Resource

Submitter Home DAAC

History

Hardware Resource

Apply Clear Set to Defaults Dismiss

Figure 3.4.1.6-2. Submit Window

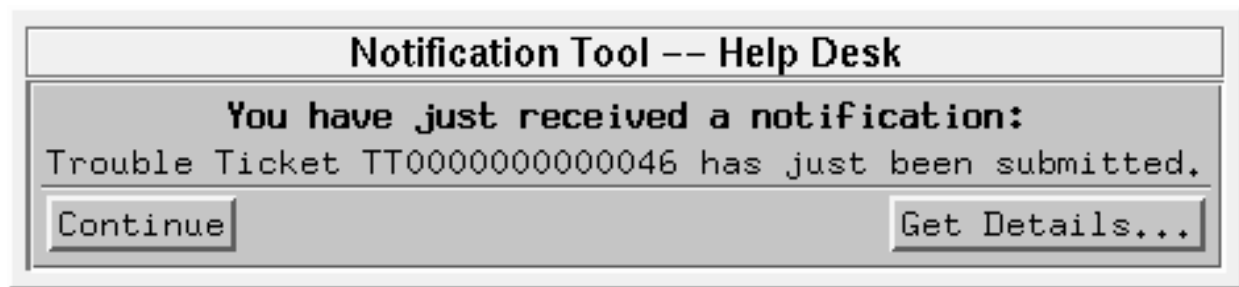


Figure 3.4.1.6-3. Remedy Notification

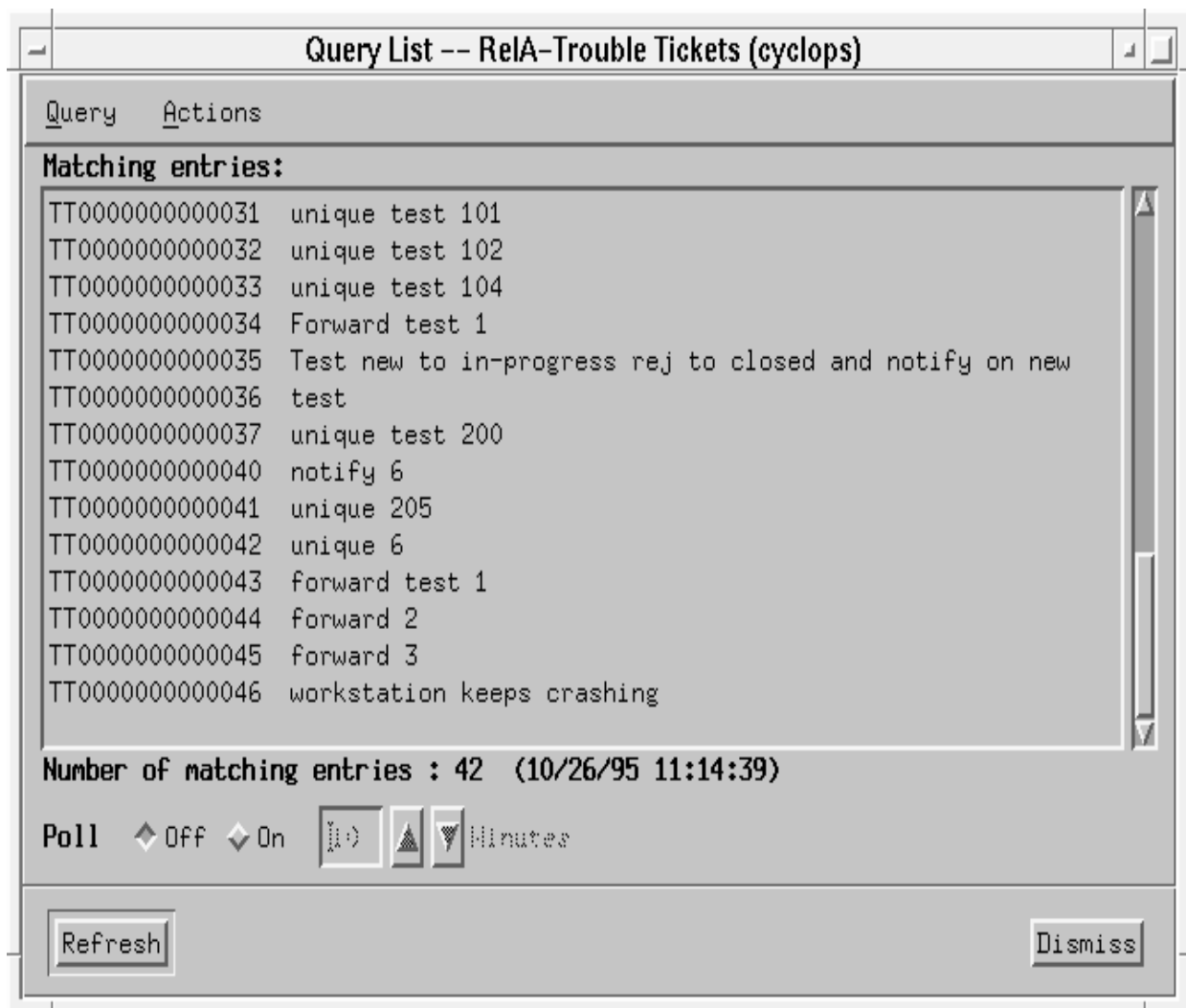


Figure 3.4.1.6-4. Trouble Ticket List

Modify Individual — RelA-Trouble Tickets (cyclops)

Options

Ticket-Id JT0000000000046 Ticket Status New Assigned-Priority Low

Short Description workstation keeps crashing Submitter Impact Low

Long-Description cyclops keeps crashing Resolution Log

Submitter ID jniller Assigned-To Closing Code

Submitter Name jniller Last-modified-by jniller Rejection Code

Submitter Phone (301) 925-1133 Create-date 10/26/95 11:11:25 Closed/Rejected-by

Submitter eMail jniller@eos.hitc.com Modified-date 10/26/95 11:11:25 Close/Rejection-date

Submitter Home D44C Software Resource

History Key Words Hardware Resource cyclops, hitc, com

Forward Forwarded-to Forwarded-from Unique-Identifier

Forwarded-by Forward-date

Forward-to-email

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.1.6-5. Trouble Ticket New

Modify Individual — RelA-Trouble Tickets (cyclops)

Options

Ticket-Id JT0000000000046 Ticket Status Assigned Assigned-Priority Medium

Short Description workstation keeps crashing Submitter Impact Low

Long-Description cyclops keeps crashing Resolution Log

Submitter ID dmiller Assigned-To Administrator Closing Code

Submitter Name dmiller Last-modified-by Help Desk Rejection Code

Submitter Phone (301) 925-1133 Create-date 10/26/95 11:11:25 Closed/Rejected-by

Submitter eMail dmiller@eos.hitc.com Modified-date 10/26/95 11:19:18 Close/Rejection-date

Submitter Home DARC Software Resource

History Key Words Hardware Resource cyclops, hitc, com

Forward Forwarded-to Forwarded-From Unique-Identifier

Forwarded-by Forward-date

Forward-to-email

Number 1 of 1

Back Previous Next Done

Figure 3.4.1.6-6. Trouble Ticket Assigned

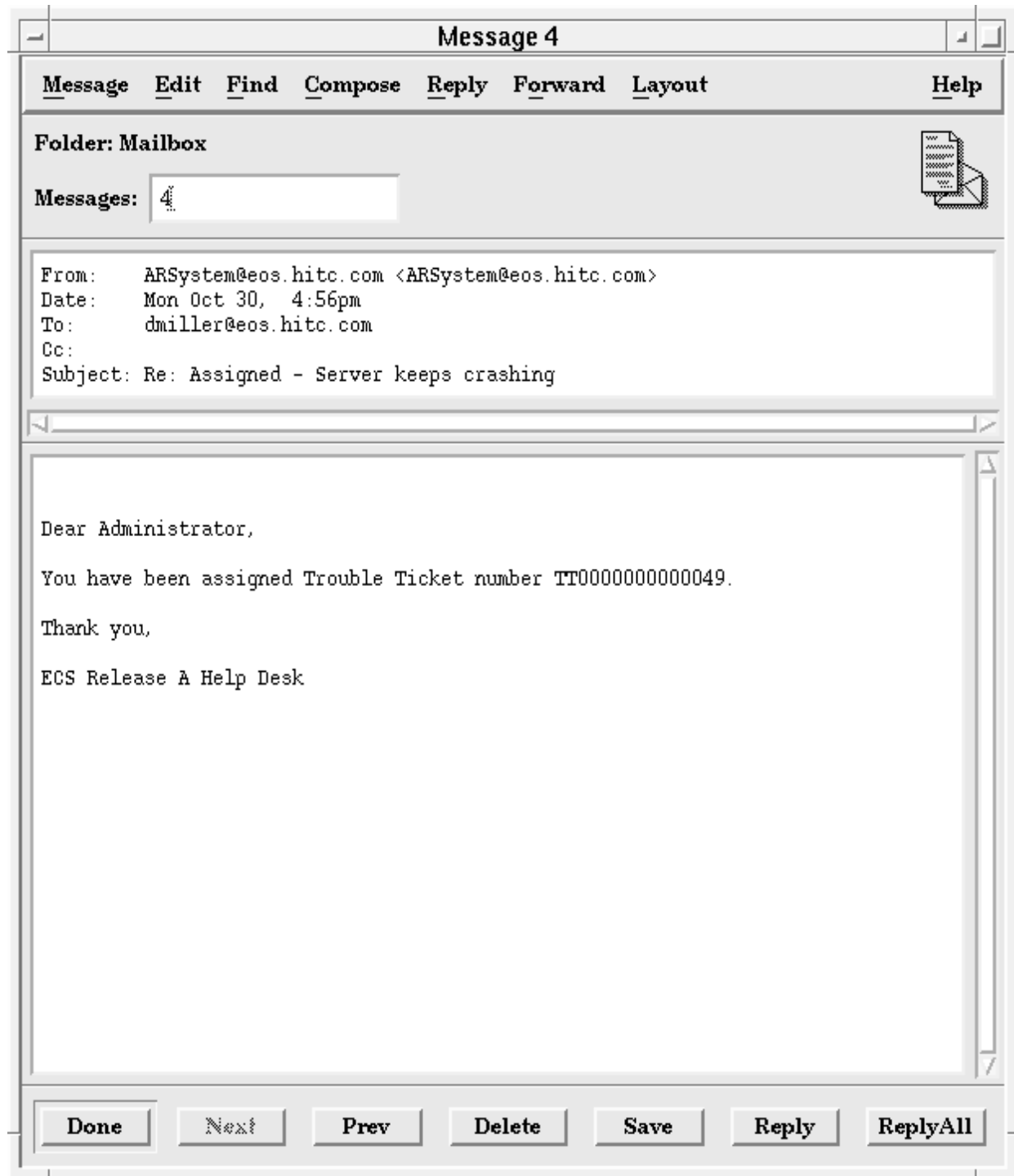


Figure 3.4.1.6-7. Assigned to E-Mail

Modify Individual — RelA-Trouble Tickets (cyclops)

Options

Ticket-Id JT0000000000046 Ticket Status Assigned Assigned-Priority Medium

Short Description workstation keeps crashing Submitter Impact Low

Long-Description
cyclops keeps crashing

Resolution Log
There is a problem with the system board

Submitter ID
dmiller

Assigned-To
Maintenance Engineer

Closing Code

Submitter Name
dmiller

Last-modified-by
Administrator

Rejection Code

Submitter Phone
(301) 925-1133

Create-date
10/26/95 11:11:25

Closed/Rejected-by

Submitter eMail
dmiller@eos.hitc.com

Modified-date
10/26/95 11:23:42

Close/Rejection-date

Submitter Home DARC

Software Resource

History

Key Words

Hardware Resource
cyclops, hitc, com

Forward

Forwarded-to

Forwarded-from

Unique-Identifier

Forwarded-by

Forward-date

Forward-to-email

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.1.6-8. Trouble Ticket Resolution Log 1

Modify Individual — RelA-Trouble Tickets (cyclops)

Options

Ticket-Id JT0000000000046 Ticket Status Assigned Assigned-Priority Medium

Short Description workstation keeps crashing Submitter Impact Low

Long-Description
cyclops keeps crashing

Resolution Log
cyclops.hitc.com is an HP

Submitter ID
jshiller

Assigned-To
Maintenance Engineer

Closing Code

Submitter Name
jshiller

Last-modified-by
Administrator

Rejection Code

Submitter Phone
(301) 925-1133

Create-date
10/26/95 11:11:25

Closed/Rejected-by

Submitter eMail
jshiller@eos.hitc.com

Modified-date
10/26/95 11:23:42

Close/Rejection-date

Submitter Home DAPC

Software Resource

History

Key Words

Hardware Resource
cyclops.hitc.com

Forward

Forwarded-to

Forwarded-from

Unique-Identifier

Forwarded-by

Forward-date

Forward-to-email

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.1.6-9. Trouble Ticket Resolution Log 2

Modify Individual — RelA-Trouble Tickets (cyclops)

Buttons

Ticket-Id: JT000000000000046 Ticket Status: Closed Assigned-Priority: Medium

Short Description: workstation keeps crashing Submitter Impact: Low

Long-Description: cyclops keeps crashing

Resolution Log: Vendor arrived at 3:00 pm 10/26/95
Vendor left at 4:45 pm 10/26/95
Vendor replaced system board.

Submitter ID: jshiller Assigned-To: Maintenance Engineer Closing Code: Hardware Error

Submitter Name: jshiller Last-modified-by: Administrator Rejection Code: []

Submitter Phone: (301) 925-1133 Create-date: 10/26/95 11:11:25 Closed/Rejected-by: []

Submitter eMail: jshiller@eos.hitc.com Modified-date: 10/26/95 11:40:46 Close/Rejection-date: []

Submitter Home DACC: [] Software Resource: []

History: [] Key Words: [] Hardware Resource: cyclops.hitc.com

Forward: Forwarded-to: [] Forwarded-From: [] Unique-Identifier: []

Forwarded-by: [] Forward-date: []

Forward-to-email: []

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.1.6-10. Trouble Ticket Close

3.4.2 Hardware Emergency Change Scenario

3.4.2.1 Scenario Description

This scenario describes the failure of hardware (an automated tape library (ATL)) at 7 p.m. on a Saturday evening. The user submits a Trouble Ticket (TT) for problems with the ATL. The Ops Supervisor receives the Trouble Ticket. It is then routed to the Systems Administrator (SA) who confirms the problem then notifies the site Maintenance Engineer (ME). The ME runs diagnostics and reports the problem and symptoms to the vendor's maintenance technician (VMT). When the VMT arrives, he concludes that a controller card has failed. The only card the VMT has available is of a later version and no spares are available on site. It will be Monday at the earliest before a replacement board of the same make and model can be located. The site cannot afford to have the ATL down until Monday, so the later version of the card is installed as a temporary fix. The actors in this scenario are the User, Ops Supervisor, SA, ME, VMT, Sustaining Engineer, Operations Crew Chief (i.e., shift leader), DAAC Manager, CM Administrator, ECS SEO and the ECS system.

3.4.2.2 Frequency

This scenario will run whenever there is a hardware problem that involves a change to the baselined configuration.

3.4.2.3 Assumptions

1. The Ops Supervisor continuously monitors for new TT's.
2. The SA and ME periodically checks for E-mail for notifications of assigned Trouble Tickets.
3. In this scenario, the Ops Supervisor, SA and ME can assign any status or priority to a Trouble Ticket. This will be configurable at each DAAC.
4. Key players (site Sustaining Engineer, site CM administrator, SEO staff member) will have access to the change request manager application and the Distributed Defect Tracking System (DDTS), used to record and track proposed changes to ECS resources.
5. When working with the Resolution Log, one can view all entries if one clicks on the button immediately to the right of the text box.
6. The Remedy schema shown is still being discussed.
7. Fields required for TT submission (Short Description and Submitter ID) are provided.
8. Trouble Ticketing is designed and configured to run 24 hours/day.

3.4.2.4 Components

Figure 3.4.2.4-1 indicates the interaction between the DAAC personnel and the ECS subsystems.

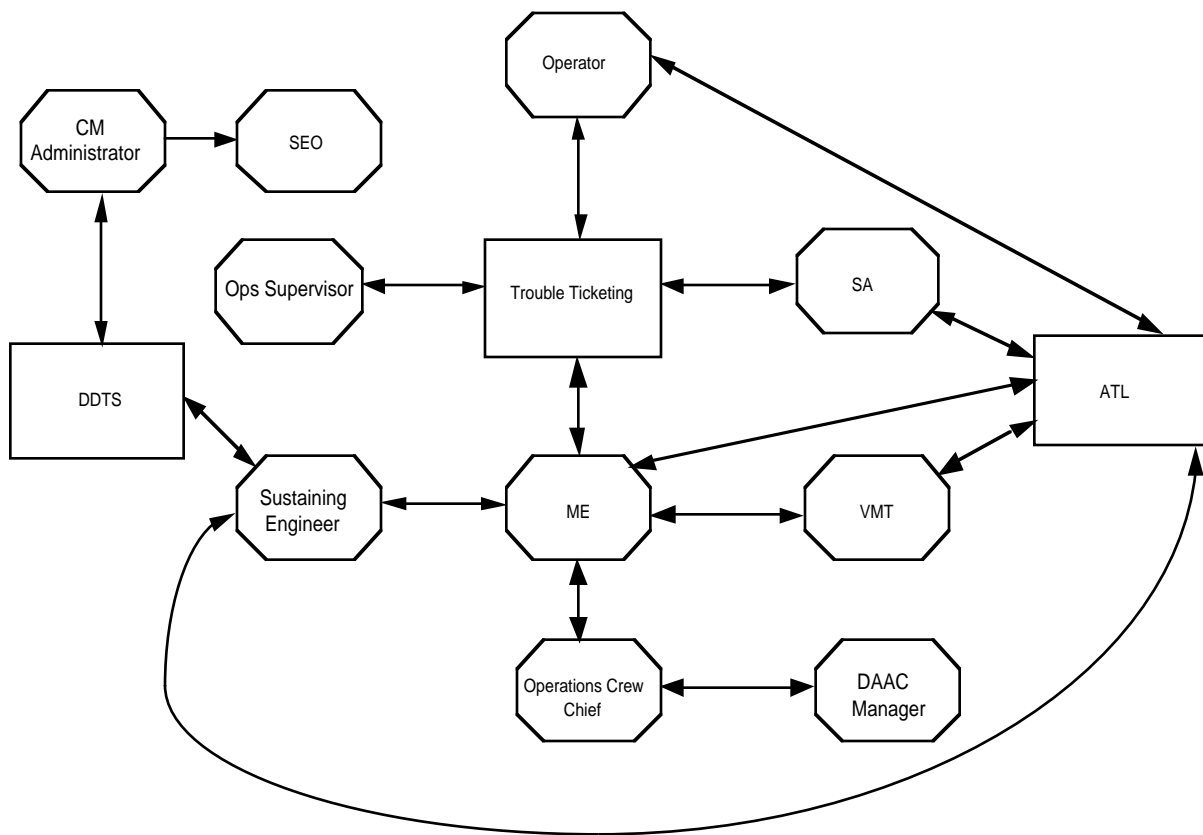


Figure 3.4.2.4-1. Hardware Emergency Change Scenario Components

3.4.2.5 Preconditions

Preconditions for this scenario are a Trouble Ticket must be submitted, an Ops Supervisor must be monitoring for incoming Trouble Tickets, Remedy should be running normally.

3.4.2.6 Detailed Steps of Process

Table 3.4.2.6-1 represents the details of this scenario. The times and duration given are approximate.

Table 3.4.2.6-1. Hardware Emergency Change Process (1 of 7)

| Step | Time (mins) | User | Operator (Ops Supervisor, SA, ME, VMT, Sustaining Engineer, Operations Crew Chief, DAAC Manager, CM Administrator) | ECS System | Figure |
|------|-------------|--|--|--|-----------|
| 1 | <1 | Upon realization that a problem exists, a user logs into Remedy. | | Remedy starts with the Release A Trouble Ticketing schema. | 3.4.2.6-1 |
| 2 | <1 | User chooses "Open Submit" from the File menu. | | | |
| 3 | <1 | User selects the Submit Option. | | Submit window opens | |
| 4 | 15 | User enters problem impact, problem short description, problem long description, submitter id and hardware resource. | | | |
| 5 | <1 | Satisfied with entry, user then clicks on the Apply button to submit TT. | | | 3.4.2.6-2 |
| 6 | <1 | | | System creates new entry in Remedy, fills in user info (user name, e-mail, phone) notifies User Services staff member, displays successful submission message with TT number at bottom of Submit window, and notifies User via e-mail. | 3.4.2.6-3 |
| 7 | <1 | Receives e-mail verifying that the TT was submitted. | Ops Supervisor responsible for assigning Trouble Tickets receives notification that a new Trouble Ticket has entered the system. | | |

| Step | Time (mins) | User | Operator (Ops Supervisor, SA, ME, VMT, Sustaining Engineer, Operations Crew Chief, DAAC Manager, CM Administrator) | ECS System | Figure |
|-------------|--------------------|-------------|---|--|---------------|
| 8 | <1 | | Ops Supervisor refreshes TT list to check for most recent TTs. | System (Remedy) refreshes list. | 3.4.2.6-4 |
| 9 | <1 | | Ops Supervisor selects TT for work and opens it. | System (Remedy) opens TT. | 3.4.2.6-5 |
| 10 | 20 | | On examining the detailed information, the Ops Supervisor changes the value of Ticket Status from New to Assigned. | (Options: Assigned, and Forwarded) | |
| 11 | <1 | | The Ops Supervisor assigns the value of Medium to the Assigned-Priority field. | (Options: Low, Medium, High) | |
| 12 | <1 | | The Ops Supervisor assigns the Trouble Ticket to SA to fix the problem. | | |
| 13 | <1 | | The Ops Supervisor clicks on Apply to carry out these new changes. | System (Remedy) delivers e-mail to SA. | 3.4.2.6-6 |
| 14 | <1 | | The SA receives e-mail notifying him/her of the assignment. | | |
| 15 | <20 | | Assessing the Trouble Ticket, the SA confirms that the system will not operate. | | |
| 16 | <1 | | The SA then changes the Assigned-to field to ME. | | |
| 17 | <1 | | The SA then clicks on the submit button to carry out these changes/additions. | System (Remedy) delivers e-mail to ME. | |

| Step | Time (mins) | User | Operator (Ops Supervisor, SA, ME, VMT, Sustaining Engineer, Operations Crew Chief, DAAC Manager, CM Administrator) | ECS System | Figure |
|------|-------------|------|---|------------|-----------|
| 18 | <1 | | The ME receives e-mail notifying him/her of the assignment. | | |
| 19 | 20 | | The ME runs further diagnostics, confirms that ATM is the source of the problem and makes an entry in the Resolution Log to this effect then reports the problem to the maintenance vendor. Because of the emergency nature of this scenario, the formality of "Solution Reviewal" by the TT Review Board is foregone. Otherwise this would occur before reporting the problem to the maintenance vendor. | | 3.4.2.6-7 |
| 20 | 240 | | The VMT arrives. | | |
| 21 | 60 | | The VMT concludes that the controller card has failed. | | |
| 22 | 30 | | The VMT reports to the ME that the only controller card that is immediately available is of a later version. It will be 48 hours before a replacement card of the same version can be obtained. | | |
| 23 | 15 | | The ME reports this to the Operations Crew Chief for a decision. | | |

| Step | Time (mins) | User | Operator (Ops Supervisor, SA, ME, VMT, Sustaining Engineer, Operations Crew Chief, DAAC Manager, CM Administrator) | ECS System | Figure |
|------|-------------|------|--|--|----------------------------|
| 24 | 20 | | Since the DAAC cannot afford to have the ATL down for 48 hours, the Crew Chief calls the DAAC Manager at home, appraises him of the situation, and obtains approval to replace the card with the later version if tests conclude that it works properly. | | |
| 25 | 90 | | The VMT replaces the card. | | |
| 26 | 60 | | The sites Sustaining Engineer (SE) brings the ATL back up and verifies that it works properly. The ME updates the property record with the model, version, and serial number of the new board. | | |
| 27 | 30 | | SE executes DDTS to compose a CCR to record the ATL configuration change. SE clicks the "Submit" button to bring up the CCR input screen. SE enters the class and project name for the CCR. SE enters the date, title, problem description, proposed change, submitter's name, SE's name, priority, change action taken, and DAAC manager's approval on the form and then clicks the "Commit" button. | DDTS displays its base menu page. DDTS displays an initial input screen. DDTS accepts the input and displays the CCR form. DDTS stores the CCR information in its database, sets an initial state (new), and sends e-mail notification of its existence to the site's CM Administrator. | 3.4.2.6-8 3.4.2.6-9 |

| Step | Time (mins) | User | Operator (Ops Supervisor, SA, ME, VMT, Sustaining Engineer, Operations Crew Chief, DAAC Manager, CM Administrator) | ECS System | Figure |
|------|-----------------------|------|---|---|------------|
| 28 | Monday morning 360 | | Upon the consent of the TT Review Board the VMT returns on Monday, coordinates with the ME and DAAC management and is allowed to replace the later version of the controller card with one of the same make and model that the later version replaced. SE tests the new controller board, finds that it works properly, and bring the ATL back on line. | | |
| 29 | 30 | | TT Review Board Chair makes appropriate changes in the property record. The TT Review Board Chair then records the time the vendor arrived and departed and actions taken to resolve the problem into the TT Resolution Log. | | 3.4.2.6-10 |
| 30 | 15 | | The TT Review Board Chair references the related CCR in the TT Related CCR field. The TT Review Board Chair then enters a closing code into the TT. The TT Review Board Chair then changes the TT Status field to closed. The TT Review Board Chair then clicks on Apply to update the TT with these changes. | Remedy stores changes and sends e-mail to User. | 3.4.2.6-11 |

| Step | Time (mins) | User | Operator (Ops Supervisor, SA, ME, VMT, Sustaining Engineer, Operations Crew Chief, DAAC Manager, CM Administrator) | ECS System | Figure |
|------|-------------|---|---|--|-----------------------------|
| 31 | <1 | Operator receives e-mail informing him/her that TT is Closed. | | | |
| 32 | 20 | | SE accesses DDTS to record ATL replacement SE selects appropriate CCR and then clicks "Modify" menu. SE selects 'Modify Record' option. SE enters an update to the problem's resolution. Includes recommendation that CCR be closed. Then clicks the "Commit" button. | DDTS displays base page. DDTS displays the "Modify" menu. DDTS stores the information in its database and notifies (via e-mail) site CM administrator of the update. | 3.4.2.6-8 3.4.2.6-12 |
| 33 | 15 | | Site CM Admin. reviews e-mail, reads CCR notification, accesses DDTS, and clicks the "Print" button to get a hard copy of the CCR for submission to the site CCB. Site CM Admin. selects full Page CCR format, CCR to be printed, and the printer that will print CCR. Then clicks "Print" button. | DDTS displays the print options DDTS prints CCR information. | |
| 34 | 20 | | Site CM Admin. adds CCR to CCB's agenda and submits a hard copy of the CCR to the site CCB for informational and disposition purposes. CCB reviews CCR and provides instructions to close it. | | |

| Step | Time (mins) | User | Operator (Ops Supervisor, SA, ME, VMT, Sustaining Engineer, Operations Crew Chief, DAAC Manager, CM Administrator) | ECS System | Figure |
|------|-------------|------|--|--|------------------------------------|
| 35 | 30 | | <p>Site CM Admin. executes DDTS to add notes concerning the site CCB's disposition instructions.</p> <p>Site CM Admin. selects the appropriate CCR in the index section of the screen and then clicks the "Add Enclosure" button.</p> <p>Site CM Admin. enters information and clicks the editor's File Menu's save option.</p> <p>Site CM Admin. enters an enclosure title such as 'Site CCB Closure'.</p> <p>Site CM Admin. changes CCR's state to "resolved".</p> | <p>DDTS displays the base page.</p> <p>DDTS initiates a text editor.</p> <p>DDTS saves the information under the entered enclosure title.</p> <p>DDTS changes state and sends e-mail notification to the SE.</p> | <p>3.4.2.6-8</p> <p>3.4.2.6-13</p> |
| 36 | 5 | | <p>Site CM Admin. executes the print option to print a copy of the CCR to a file.</p> <p>Site CM Admin. uses e-mail facility to send a copy of the CCR to the SEO for informational purposes only.</p> | <p>DDTS prints a copy of the CCR to a designated file.</p> <p>E-mail facility mails the file to the SEO.</p> | |

3.4.2.7 Postconditions

ATL is operational with its original configuration restored. There is a CCR in the DDTS database which documents the temporary change.

The screenshot displays a software window titled "Modify Schema -- RelA-Trouble Tickets". The window has a menu bar with "Edit", "Attributes", and "Views". Below the menu bar, there are two tabs: "View Name" (set to "Default Admin View") and "Schema Name" (set to "RelA-Trouble Tickets").

The main area of the window is a form with the following fields and controls:

- Ticket-Id:** A text field containing "TT".
- Ticket Status:** A dropdown menu set to "New".
- Assigned-Priority:** A dropdown menu set to "Low".
- Forward:** A button.
- Short Description:** A text field.
- Submitter Impact:** A dropdown menu set to "Low".
- Forward-to:** A text field.
- Long-Description:** A large text area.
- Resolution Log:** A large text area.
- Forwarded-From:** A text field.
- Forwarded-by:** A text field.
- Forward-date:** A text field.
- Submitter ID:** A text field.
- Assigned-To:** A text field.
- Closing Code:** A text field.
- Unique-Identifier:** A text field.
- Submitter Name:** A text field.
- Last-modified-by:** A text field.
- Closed-by:** A text field.
- Forwarded-to-1:** A text field.
- Submitter Phone:** A text field.
- Create-date:** A text field.
- Close-date:** A text field.
- Forwarded-to-2:** A text field.
- Submitter eMail:** A text field.
- Last-Modified-date:** A text field.
- Software Resource:** A text field.
- Forwarded-to-3:** A text field.
- Submitter Home DAAC:** A text field.
- Related CCR:** A text field.
- Hardware Resource:** A text field.
- Forwarded-to-4:** A text field.
- History:** A text field.
- Key Words:** A text field.
- Dr-To-Forward:** A text field.
- Forward-Email:** A text field.
- Time New High:** A text field.
- Time Assigned High:** A text field.
- Time New Med:** A text field.
- Time Assigned Med:** A text field.
- Time New Low:** A text field.
- Time Assigned Low:** A text field.

At the bottom of the window, there are four buttons: "Apply", "Set Help...", "Change History...", and "Dismiss".

Figure 3.4.2.6-1. Remedy Trouble Ticket

Submit -- RelA-Trouble Tickets (cyclops)

Ticket-Id

Ticket Status

New

Assigned-Priority

Low

Short Description

Submitter Impact

High

Long-Description

problem with the automated tape library

Resolution Log

Submitter ID

Assigned-To

Closing Code

Submitter Name

Last-modified-by

Rejection Code

Submitter Phone

Create-date

Close/Rejection-date

Submitter eMail

Modified-date

Software Resource

Submitter Home DAAC

Hardware Resource

History

Apply

Clear

Set to Defaults

Dismiss

Figure 3.4.2.6-2. Submit Window

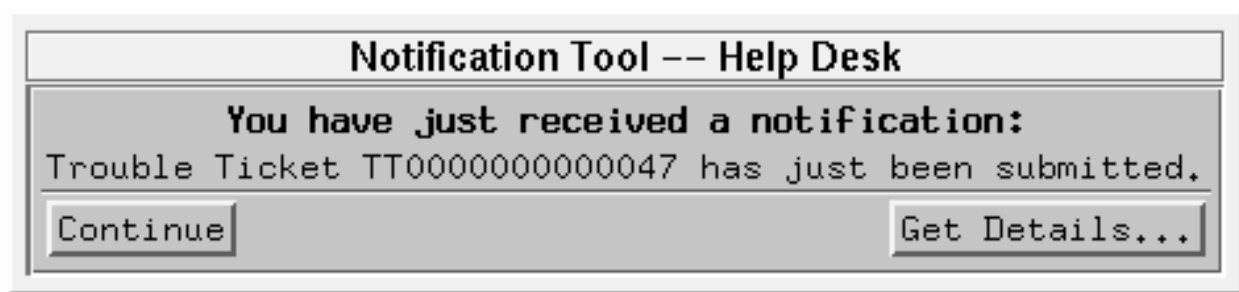


Figure 3.4.2.6-3. Remedy Notification

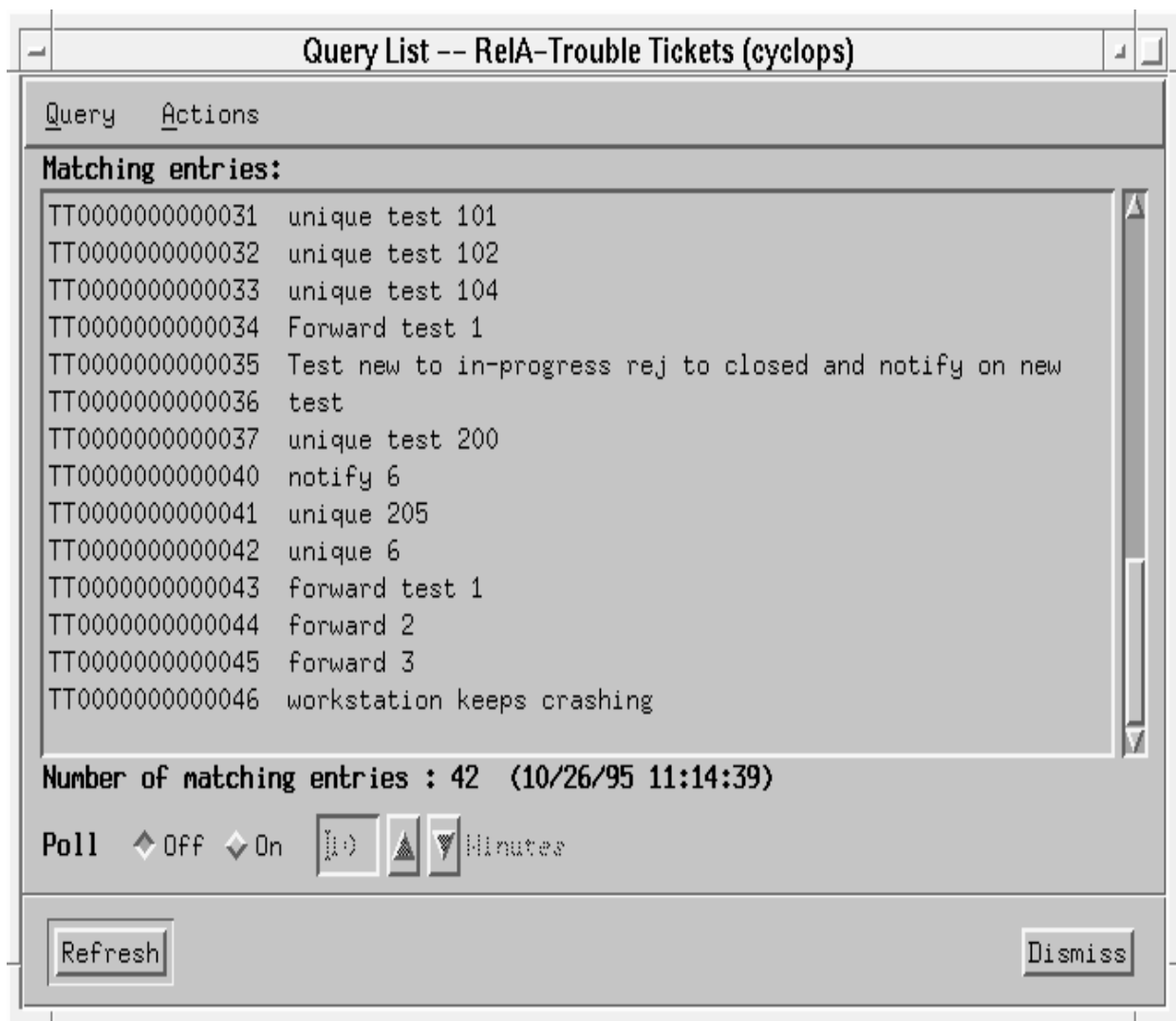


Figure 3.4.2.6-4. Trouble Ticket List

Modify Individual -- RelA-Trouble Tickets (cyclops.HITC.COM)

Options

Ticket-Id JT0000000000047 Ticket Status New Assigned-Priority Low

Short Description problem with the automated tape library Submitter Impact High

Long-Description problem with the automated tape library Resolution Log

Submitter ID jhiller Assigned-To Closing Code

Submitter Name jhiller Last-modified-by Rejection Code

Submitter Phone (301) 925-1133 Create-date 10/26/95 13:06:37 Closed/Rejected-by

Submitter eMail jhiller@eos.hitc.com Modified-date 10/26/95 13:06:37 Close/Rejection-date

Submitter Home DARC Software Resource

History Key Words Hardware Resource automated tape library

Forward Forwarded-to Forwarded-From Unique-Identifier

Forwarded-by Forward-date

Forward-to-email

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.2.6-5. Trouble Ticket New

Modify Individual -- RelA-Trouble Tickets (cyclops.HITC.COM)

Options

Ticket-Id JT0000000000047 Ticket Status Assigned Assigned-Priority High

Short Description problem with the automated tape library Submitter Impact High

Long-Description problem with the automated tape library Resolution Log

Submitter ID dmiller Assigned-To Administrator Closing Code

Submitter Name dmiller Last-modified-by dmiller Rejection Code

Submitter Phone (301) 925-1133 Create-date 10/26/95 13:06:37 Closed/Rejected-by

Submitter eMail dmiller@eos.hitc.com Modified-date 10/26/95 13:06:37 Close/Rejection-date

Submitter Home DARC Software Resource

History Key Words Hardware Resource automated tape library

Forward Forwarded-to Forwarded-From Unique-Identifier

Forwarded-by Forward-date

Forward-to-email

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.2.6-6. Trouble Ticket Assigned

Modify Individual -- RelA-Trouble Tickets (cyclops.HITC.COM)

Options

Ticket-Id: JT00000000000047 Ticket Status: Assigned Assigned-Priority: High

Short Description: problem with the automated tape library Submitter Impact: High

Long-Description: problem with the automated tape library

Resolution Log: automated tape library is not operating

Submitter ID: jhiller Assigned-To: Maintenance Engineer Closing Code: []

Submitter Name: jhiller Last-modified-by: jhiller Rejection Code: []

Submitter Phone: (4301) 925-1133 Create-date: 10/26/95 13:06:37 Closed/Rejected-by: []

Submitter eMail: jhiller@eos.hito.com Modified-date: 10/26/95 13:06:37 Close/Rejection-date: []

Submitter Home D44C Software Resource: []

History: [] Key Words: [] Hardware Resource: automated tape library

Forward: Forwarded-to: [] Forwarded-From: [] Unique-Identifier: []

Forwarded-by: [] Forward-date: []

Forward-to-email: []

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.2.6-7. Trouble Ticket Resolution Log 1

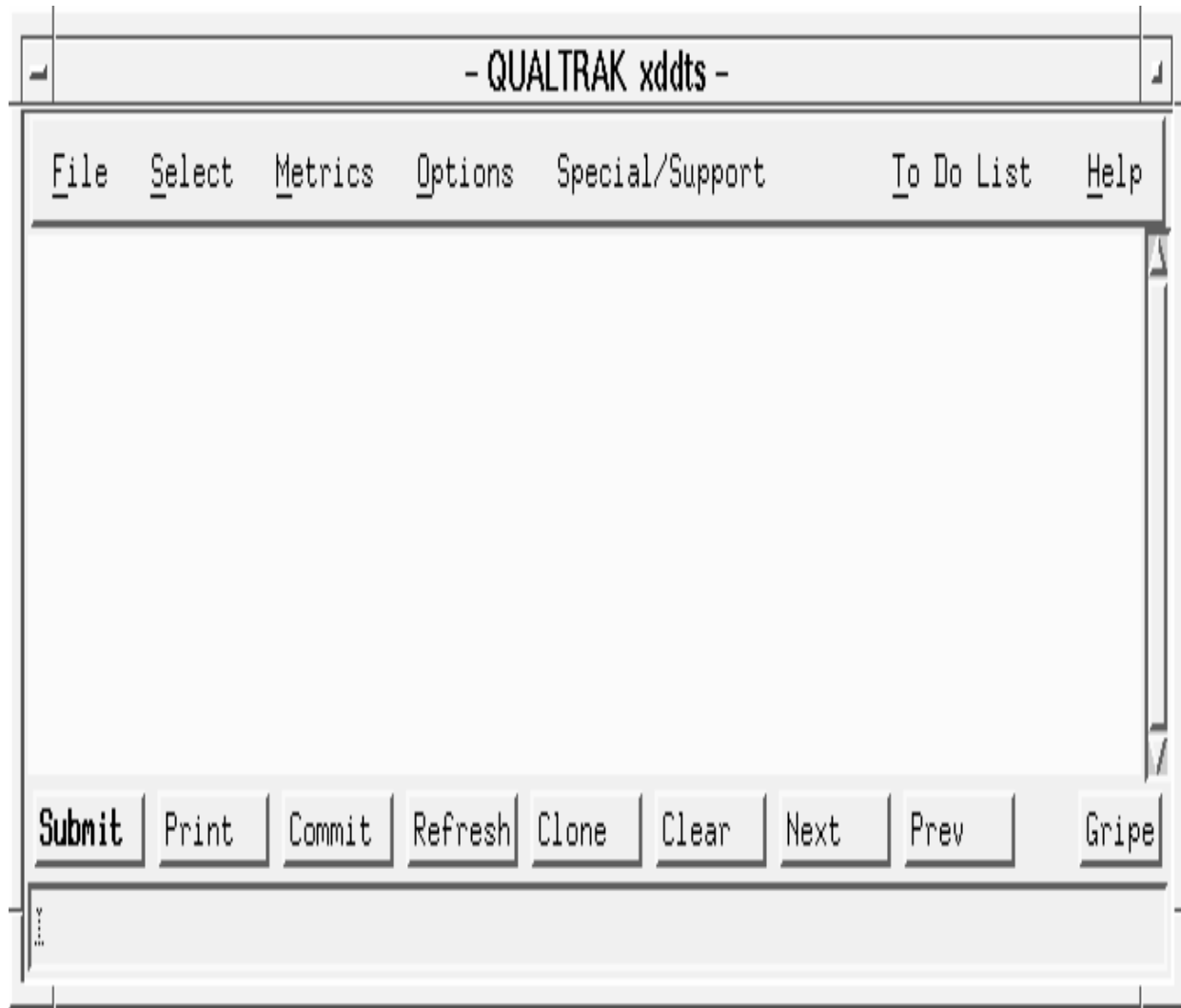


Figure 3.4.2.6-8. DDTS Base

Defect

Modify

Change_State

Links

Cfg_Mgt

Help

*
* S U B M I T A N E W D E F E C T *
*

Submit to which class of projects: software

Project name:

`?' for context sensitive help, `esc' to back up, `control-C' to abort

Figure 3.4.2.6-9. DDTS Submit

Modify Individual -- RelA-Trouble Tickets (cyclops.HITC.COM)

Options

Ticket-Id JT00000000000047 Ticket Status Closed Assigned-Priority High

Short Description problem with the automated tape library Submitter Impact High

Long-Description
problem with the automated tape library

Resolution Log
Vendor arrived at 7:00 pm 10/27/95
Vendor left at 10:00 pm 10/27/95
Vendor replaced controller card.

Submitter ID
jmillar

Assigned-To
Maintenance Engineer

Closing Code
Hardware Error

Submitter Name
jmillar

Last-modified-by
Help Desk

Rejection Code
[]

Submitter Phone
(301) 925-1133

Create-date
10/26/95 13:06:37

Closed/Rejected-by
[]

Submitter eMail
jmillar@eos.hito.com

Modified-date
10/26/95 13:17:17

Close/Rejection-date
[]

Submitter Home D44C
[]

Software Resource
[]

History
[]

Key Words
[]

Hardware Resource
automated tape library

Forward

Forwarded-to
[]

Forwarded-From
[]

Unique-Identifier
[]

Forwarded-by
[]

Forward-date
[]

Forward-to-email
[]

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.2.6-10. Trouble Ticket Resolution Log 2

Modify Individual -- RelA-Trouble Tickets (cyclops.HITC.COM)

Buttons

Ticket-Id JT00000000000047 Ticket Status Closed Assigned-Priority High

Short Description problem with the automated tape library Submitter Impact High

Long-Description problem with the automated tape library

Resolution Log
Vendor arrived at 7:00 pm 10/27/95
Vendor left at 10:00 pm 10/27/95
Vendor replaced controller card.

Submitter ID jshiller Assigned-To Maintenance Engineer Closing Code Hardware Error

Submitter Name jshiller Last-modified-by Help Desk Rejection Code

Submitter Phone (301) 925-1133 Create-date 10/26/95 13:06:37 Closed/Rejected-by

Submitter eMail jshiller@eos.hito.com Modified-date 10/26/95 13:17:17 Close/Rejection-date

Submitter Home D44C Software Resource

History Key Words Hardware Resource automated tape library

Forward Forwarded-to Forwarded-From Unique-Identifier

Forwarded-by Forward-date

Forward-to-email

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.4.2.6-11. Trouble Ticket Close

| Defect | | |
|--|--------------------------------------|--------------------|
| Modify | Change_State | Links Cfg_Mgt Help |
| Bug ECSed01284 | EP6_Dev | Submitted 951027 |
| Project ID: EP6_Dev-00142 | EP6, version 102095 | Assigned 951027 |
| FIXED defect report | 2 enclosures | Opened 951030 |
| Page 1/2 | | |
| "Submitter impact selection is not display in Detailed TT" | | |
| DETECTION INFORMATION | | |
| Detection method[*]: system test | LABORATORY INFORMATION | |
| Detected in phase[*]: system I&T | Evaluate engineer: dmiller | |
| Test program name: | Phone number/E-mail: 925-1133 | |
| Test system: | Date eval is due: | |
| Version of OS: | Assigned To: mscher | |
| Problem severity (1 = Showstopper)[*]: 3 | Phone/E-mail: 1123 | |
| Affects segment: Trouble Ticket | Affects segment: Trouble Ticket | |
| Affects subsystem: MSS | Subsystem[*]: Management Logistics | |
| Need fix by: | Problem type[*]: source code | |
| Related CCR #: | Recommended change[*]: source code | |
| Found in release: | Phase problem caused[*]: integration | |
| SUBMITTER INFORMATION | | |
| Submitter: Perry Miranda | Analysis time (hrs): 0 | |
| Organization: HAIS | Est. fix time (hrs): 1 | |
| Phone number: 925-1106 | Fix due date: 951030 | |
| Address: pmiranda@triton | | |

Figure 3.4.2.6-12. DDTS Modify




| Enclosures |
|---|
|    |
| History Problem Resolution |

Figure 3.4.2.6-13. DDTS Enclosures